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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,307	09/24/2001	Richard Caulfield	113272.00103	8413

27557 7590 05/27/2003

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EXAMINER

REIFSNYDER, DAVID A

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 05/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/937,307

Applicant(s)

CAULFIELD, RICHARD

Examiner

David A Reifsnnyder

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 4. 6) ☐ Other: _____

DETAILED ACTION

Specification

The specification is **objected to** because this application does not contain an **abstract of the disclosure** as required by 37 CFR 1.72(b). An **abstract** on a **separate** sheet is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1; the recitation of "an outlet **to** the cavity" is vague and indefinite as to how an outlet can be **to** the cavity. Some ways to correct this problem would be to claim ---an outlet **from** the cavity--- or ---an outlet **out of** the cavity---.

Regarding claim 8; the recitation of "the end outlet" lacks antecedent basis and does not make any sense; because it can not be understood as to how a cavity can have both an outlet and an end outlet.

Regarding claim 14; the recitation of "the blade" lacks antecedent basis. Furthermore, it is vague and indefinite as to how the blade is structurally related to the instantly claimed separator.

Regarding claim 17; the recitation of “wherein a second raceway is provided between the channels in the parting means and the second exit” is confusing because “a first raceway” was never claimed.

Regarding claim 21; the recitation of “A separator, parting means and bearing combination according to claim 19, ...” can not be understood because claim 19 claims “A separator and bearing combination...” and fails to claim a **parting means** as part of the separator and bearing combination. Therefore, claim 21 is interpreted as not having a parting means. (i.e. the preamble of claim 21 is taken to be “A separator and a bearing combination according to claim 19,”)

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 4-18; are rejected under 35 U.S.C. 102(b) as being anticipated by Kluge

Regarding claims 1 and 4-18; Kluge discloses an apparatus for separating particles entrained in a fluid to form a particle-free fluid, the apparatus comprising: a sleeve (1) adapted to be mounted over a rotatable shaft (5) for forming a helically shaped cavity therebetween; an inlet (6) with a raceway for providing the fluid to the

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helically shaped cavity; a blade/paddle means (4) operatively connected to the rotatable shaft (5) for imparting centrifugal force on the fluid within the helically shaped cavity, the helically shaped cavity also imparting centrifugal force on the fluid within the helically shaped cavity; and an outlet (7, 2, 12, 10) for removing the fluid from the helically shaped cavity opposite the inlet, the outlet (7, 2, 12, 10) including a pair of first exits (7) adjacent the sleeve (1) for slow down separated particles and some particle containing fluid and a pair of second exits (10) adjacent the shaft for the particle-free fluid, the outlet further including a parting means/second raceway (2, 12) arrange to position an inner layer of particle-free fluid from an outer layer of the particles and particle containing fluid; wherein the inlet (6) is of smaller area than the outlet (7, 2, 12, 10).

Claims 1 and 4-18; are rejected under 35 U.S.C. 102(b) as being anticipated by Bye-Jorgensen et al.

Regarding claims 1 and 4-18; Kluge discloses an apparatus for separating particles entrained in a fluid to form a particle-free fluid, the apparatus comprising: a sleeve (12) adapted to be mounted over a rotatable shaft (20) for forming a helically shaped cavity therebetween; an inlet (24) with a raceway for providing the fluid to the helically shaped cavity; a blade/paddle means (32) operatively connected to the rotatable shaft (20) for imparting centrifugal force on the fluid within the helically shaped cavity, the helically shaped cavity also imparting centrifugal force on the fluid within the helically shaped cavity; and an outlet for removing the fluid from the helically shaped cavity opposite the inlet, the outlet including an exit adjacent the sleeve for slow down separated particles and some particle containing fluid, and a second exit adjacent the

shaft for the particle-free fluid, the outlet further including a parting means/second raceway arrange to position an inner layer of particle-free fluid from an outer layer of the particles and particle containing fluid; wherein the inlet is of smaller area than the outlet. (see fig.1 and col. 3, lines 1-30)

Claims 1-8, 16 19 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Rafferty et al.

Regarding claims 1-8, 16, 19 and 21; Rafferty et al. discloses an apparatus and bearing combination, the apparatus is for providing water to the bearing, the bearing comprising a sieve means, the apparatus comprising: a frustoconical sleeve adapted to be mounted over a rotatable shaft for forming a helically shaped cavity therebetween; an inlet with a raceway for providing the water to the helically shaped cavity; an outlet for removing the water from the helically shaped cavity opposite the inlet, the outlet including a chamber which **is capable** of including a parting means; and a vane/paddle means operatively connected to the shaft for imparting centrifugal force on the water within the helically shaped cavity, the helically shaped cavity also imparting centrifugal force on the water within the helically shaped cavity; wherein the inlet is of smaller area than the outlet and the helically shaped cavity increases in cross-sectional area along its length from the inlet to the outlet. (see Figs. 3-7 and 12-14; see col. 4 line 19 to col. 5, line 56) Furthermore, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the

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claimed apparatus from a prior art apparatus satisfying the claimed structural limitations.

Ex parte Masham, 2 USPQ2d 1647 (1987).

Allowable Subject Matter

Claim 20 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The main reason for the allowance of claim 20 over the prior art of record fails to disclose or fairly suggest the instantly claimed **separator, parting means and a bearing combination, the separator including all of the limitations of claim 1.**

Rafferty et al. fails to disclose or fairly suggest the instantly claimed **parting means.**

Kluge and Bye-Jorgenson et al. fails to disclose or fairly suggest the instantly claimed **bearing means.** Furthermore, there is no way to combine either Kluge and Bye-


Jorgenson et al. with Rafferty et al. or vice-versa, because Kluge and Bye-Jorgenson et al. disclose centrifugal separators for separating particulates from a fluid, and Rafferty et al. discloses an apparatus for providing water to a bearing. It is noted that Rafferty et al.'s apparatus utilizes centrifugal force to provide water to his bearing; however, Rafferty et al. fails to disclose or fairly suggest that his apparatus is used as a separator to separate particulates from the water which is provided to his bearing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Reifsnyder whose telephone number is 1-703-308-0456. The examiner can normally be reached on M-F 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda M Walker can be reached on 1-703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 1-703-872-9310 for regular communications and 1-703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 1-703-308-3601.


David A Reifsnyder
Primary Examiner
Art Unit 1723

DAR
May 25, 2003